

convex base, which required suspension when in use, for which ears projecting from the rim were provided; and where these did not exist the pot had to be supported when resting upon the earth. I am not aware of the existence of any vessel from this locality having a flat bottom.

In the rude and heavy vessels no deviation was made from the plain lines of the gourd, but in the finer examples the monotony of this form was relieved by flaring or contracting the lips, and in constructing double shoulders.

In some instances the inside, as well as the exterior, was colored a bright red, as if to conceal the inequalities of their rough surfaces, but there is no record of the discovery within the district under consideration of a pot ornamented with colored designs.

Nor are there specimens, so far as I can learn, from the Middle and New England States of bottle-shaped or long necked vases, so frequently met with among the mound relics, and in some sections of the South; and no attempt was made to imitate the human form, or that of birds and animals. The nearest approach thereto, as I have learned from Dr. Rau, are little grotesque human heads or masks stuck on the outside of the vessels below the corners of the rims. A number of fragments thus decorated, which were collected in the State of New York by Mr. F. H. Cushing, are in the National Museum at Washington.

When we consider the difficulties under which these ancient potters wrought their crude materials, the absence of mechanical appliances (unaided by the potter's wheel), their complete ignorance of the first rudiments of artistic knowledge, following only such lines as fancy dictated, we cannot but express amazement at the accuracy of the workmanship and the originality, if not the beauty, of the designs.

It was not the beauty of the trained Grecian or Etruscan schools, but the naturally developed taste of the aboriginee, who sought nature for her models, and found them in the gourd and melon.

Description of Datames magna Hancock. By Joseph L. Hancock.

(Read before the American Philosophical Society, April 15, 1887.)

Length 46 mm. (including mandibles); abdomen $24\frac{1}{2}$ mm.; thorax 4 mm.; head 7 mm. Breadth, abdomen 9 mm.; head $10\frac{1}{2}$ mm.; jaws $10\frac{1}{2}$ mm.

Color pale reddish yellowish white, more reddish on head, falces and tips of last joints of legs; paler on abdomen, legs and labial palpi. Last joint (tarsus) of maxillary palpi and longitudinal marking under surface of tibia of the same member, deep brownish-black, fingers of mandibles burnished chestnut-brown, becoming black at points; margin of bristly hairs surrounding base of fingers, reddish-brown.

Cephalic Shield convexed, broader than long, anterior margin nearly straight, outer fourth sloping obliquely outwards and backwards to pos-

terior border, which is rounded ; corner eminences distinct, pale, obtuse, the front border on line with eyes ; shield covered with pale rather long reddish hairs, a bare pale border surrounding shield below, trace of median striæ hardly perceptible.

Eyes slightly elevated, small, front border on line with anterior margin of cephalic plate, encircled with black, pale color with black centre, interval equal to diameter of eye, furnished with hairs, some directed forward longer.

Base of Mandibles together not as broad as head, length of upper surface when closed 5 mm., furnished with numerous stiff reddish bristles of various length, becoming longer at base of fingers, fewer posteriorly, base slightly bulging on outer side, flattened on inner, where there are no hairs except on upper and anterior borders. Upper inner portion extended forward to form fixed finger, $6\frac{1}{2}$ mm. in length, bent slightly outward at base, directed obliquely downward and slightly outward, anterior three-fourths straight, smooth, tapering to point, unarmed, slightly grooved on inner side, which is covered with a brush of long reddish bristly hairs attached to inner side near base, directed forwards, nearly reaching to points. Below the fixed finger is a conical projection armed in front with two rows of teeth, as in figure ; on outer side from above downwards five, first and fifth denticles, second, third and fourth larger and more acute. The second projecting further forward, traces of more points visible continued down on outer margin, teeth covered externally with fringe of reddish hairs. On inner side, largest tooth above projecting farthest forward than a smaller one, after which follows two small ones with space between, trace of points on inner margin below, teeth tipped with black.

Movable Finger 7 mm., with large acute conical tooth near the base (as in figure), concave behind, convexed in front with point directed upwards and backwards, lying close on inner side is another small conical tooth with point turned more inward and forward, more anteriorly is a small denticle, trace of one midway between. Median carina extending on outer side nearly to point, lower finger set slightly posterior to upper, strongly curved, when closed points pass internal to upper pair, 1 mm. from points, motion vertical, directed from below, inwards, forwards, and slightly outwards, constricted at points, inner side covered with numerous fine feathery hairs continuous with fringe of reddish bristly hairs along inner front margin of base.

Maxillæ directed outwards, upwards and forwards, first joint immovable, bulging, triangular, separated from its fellow on opposite side by deep groove. Elongated on inner margin into a blunt pointed apophysis, surface covered with short pale hairs, second joint short, triangular, with rounded base directed forward, third joint (femur) length 11 mm., longest of maxillary joints, fourth (tibia) 10 mm., fifth (tarsus) 8 mm., length entire 34 mm., femur cylindrical, first half flattened from side to side, enlarged toward extremity. Inner surface of shaft with row of reddish spines of various lengths, increasing in length toward outer end. Tibia more perfectly cylindrical, slightly enlarging toward

extremity, four or five reddish spines forming row on inner portion of shaft, under surface of shaft presenting a longitudinal line of dark brownish-black, becoming wide at extremity; femur and tibia covered with pale yellow hairs, some exceedingly long; tarsus cylindrical becoming slightly swollen at end, color deep brownish-black, thickly set with hairs, some delicate and long, on the under surface very short stumpy hairs appear, extremity furnished with retractile organ covered with a double lip.

Labial Palpus. The first joint of the labial palpus is subcylindrical, nearly as long as first joint of maxilla, to which it is closely adherent, $4\frac{1}{2}$ mm. in length, second joint short cylindrical, trapezoidal in form, third joint same length as second, rhomboidal in form, first three joints together 8 mm., fourth joint more slender, slightly bent, 6 mm., fifth joint 7 mm., sixth joint straight and thinner, 4 mm., seventh joint still thinner and shorter, 3 mm. Anterior surface of first joint clothed with short stiff bristles of reddish color, rest of surface covered with fine pale hairs, as compared to the maxillæ the labial palpi are very slender, shorter by 8 mm. Covered with abundant hairs, some of extreme thinness and silky, quite long.

Thorax small and weak, first segment attached to head closely, pale reddish hairs radiate from this juncture, other two segments appear continuous with abdomen but of shorter diameter, on either side and at point of attachment with head are whitish folds of skin. Each segment sparsely covered with pale hairs. The under surface presents three pairs of basal joints, which are immovable, first pair separated by deep groove from basal plate of labial palpi, separated from each other by a slight median groove, second and third pairs of basal joints closer together, divided from first pair by a deep transverse groove, first pair directed transversely across, second pair inclining obliquely backwards, third pair trifle more obliquely backwards, triangular space left between last pair connecting with abdomen pale whitish.

Legs. First pair of legs 23 mm., shortest stout, first joint short, fixed, quadrangular in outline, rounded, separated by a median indentation from its fellow on opposite side, clothed with short broken-off bristles on anterior surface, second joint same length, subtriangular, short reddish bristly hairs on under surface, third joint longer than second, trapezoidal, bending upwards, fourth joint (femur) longer than third, more cylindrical, bending upwards, fifth joint (tibia) longer and thinner, bends downwards, sixth joint (metatarsus) shorter and weaker than tibia, bends downwards, tarsus one-third as long as metatarsus, two curved palish white claws articulate at extremity, sharp at points which appear red and constricted. Second pair of legs like the first with additional joint wedged in between second and third joints, length $29\frac{1}{2}$ mm. Metatarsus of first feet with row of five short red spines on dorsal surface, one more on outer extremity of tibia which forms a continuous line with the preceding ones, also an imperfect row, three in number on inner side of metatarsus. Metatarsus of second feet with five reddish spines on dorsal surface, continuous with two

at extremity of tibia. Third pair of legs 42 mm., longest. Appendages on under surface pale whitish, of a horny consistence, fan-shaped and attached by foot stalks, ten in number, five on each side, two being adherent to each of the first two, another to each of the third joints, first joint fixed, subtriangular, with base directed obliquely backwards and outwards, equal in length to first pair of basal joints, second joint longer than the basal joint, third joint half the length of the second, fourth joint slightly longer than the third, swollen on under surface changing the direction of the leg slightly backwards, motion being confined to upward movement by first three joints (exclusive of the basal joint), fifth joint (femur) cylindrical and swollen, 10 mm., sixth joint (tibia) more slender, same length, cylindrical, seventh joint (metatarsus) 7 mm. more slender, eighth joint (tarsus) $3\frac{1}{2}$ mm., armed at extremity with two pale-colored claws, regularly curved, with sharp constricted points of red color.

Abdomen. Composed of ten segments increasing in size to middle segments which are $3\frac{1}{2}$ mm. long and 9 mm. wide, slightly decreasing in size posteriorly, first joint bears the genital opening on the under surface which is enclosed by an elevated plate of pale whitish horny substance, orifice triangular, apex directed forward, which is continued into a longitudinal slit, free from hairs, second and third segment each have on middle of posterior border stigmatic openings. The abdomen as a whole is oblong, oval, elliptic in form, convexed about equally above and below, slightly compressed, pale yellowish-white, clothed with velvet of pale whitish hairs on both sides and under parts; trace of broad longitudinal band on upper surface, more naked, beset with pale whitish hairs, band becoming narrower posteriorly, being 6 mm. wide at second joint; under surface of abdomen slightly depressed by a median line, ventral opening a vertical slit 2 mm. in length on last segment, protected on both sides by narrow lips.

Habitat, Laredo, Texas; taken in 1883.

EXPLANATION OF PLATE.

A. *Datames magna* Hancock, upper surface.

B. Same, under surface.

The following are magnified views:

- a. Side view of mandible showing finger and teeth.
- b. Front view of mandible showing position of secondary teeth, right side.
- c. Maxillary palpus, left side, under surface, showing spines.
- d. Labial palpus, left side, under surface.
- e. Last three joints of third leg.
- f. Last three joints of second leg, showing spines on dorsal surface of metatarsus and tibia.
- g. Last three joints of first leg showing spines on dorsal and inner surface of metatarsus and tibia.
- h. General appearance of claws under higher power of microscope.